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MASTER FILE

DSSD CENSUS 2000 PROCEDURES AND OPERATIONS MEMORANDUM SERIES # G - 7

MEMORANDUM FOR Michael Longini
Chief, Decennial Systems and Contract
Management Office

Attention: Decennial Design, Policy and Management Branch

Through: Howard Hogan *Howard Hogan*
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Subject: Trip Report to Quebecor Petty Plant in Effingham, IL

I. INTRODUCTION

On March 30, 1999, the Quebecor Petty plant in Effingham, IL was visited to understand first hand the quality assurance activities being implemented for printing and to obtain a tour of the plant. The Plant is currently printing the Census Bureau short form enumerator questionnaire.

It is located in rural south-central Illinois approximately 110 miles west of St. Louis, MO. It occupies about one-fourth of a block size manufacturing facility in an industrial park and appears clean, organized, and well lit. There was some evidence of attention to safety. For example, the Material Safety Data Sheet area was prominently displayed.

Points of contact were government on-site monitors from the Government Printing Office (GPO) and Decennial Systems and Contract Management Office (DSCMO) as well as the Quebecor manager overseeing the printing of the short form enumerator questionnaire.

When asked, the GPO monitor felt employees' morale was high. The workers were grateful for the volume of printing being provided by the Census Bureau. The Quebecor Petty had recently bought the plant. The GPO monitor sensed the employees had some natural concerns about what the future level of work would be as equipment is rearranged.

II COMMENTS

A. Government Printing Office Monitor

The focus of discussion was recent quality problems. The GPO monitor said in the first days of production web breaks were an issue. One of the pressmen had a theory that splices in the paper rolls might be a contributing factor.

Recently about five thousand forms were made with missing bar codes. At the time of the visit, these forms were being purged. On the morning of this visit the GPO monitor had noticed a problem with trim being out of tolerance by 1/32". The Quebecor manager responded to the problem in less than ten minutes.

Sometimes when the monitors reinspect samples there is a difference of a few points for density. On the morning of the visit they were addressing this issue by recalibration of measuring instruments.

The first few days of production forms had to be stacked on palettes. This material is now being moved into boxes.

No bar code reading failures have occurred since the start of production.

On the subject of using the National Processing Center (NPC) software to transmit data, it had taken the GPO monitor only a day to learn it. He thought it was very user friendly.

B. Decennial Systems and Contract Management Office Monitor

I spoke with the DSCMO monitor about data transmission issues and thoughts about what a help desk at headquarters should cover.

Two major problems have been encountered in transmitting data. In one problem, the software sends an error message when the transmit file is being built. This halts processing. This problem was solved by the time of the visit.

The other problem was the excessive amount of time the contractor was experiencing to save data in the computer. The NPC and the DSCMO monitor have been in touch regularly to correct these problems. The long saving time may be fixed by having the contractor start a new batch file each day, as opposed to continuing the same batch file from one day to the next.

Advanced Engineering and Research Associates, the contractor building the quality information system for printing, should be prepared to accomodate this

change if that is what it takes to speed up the saving time for the contractor's data files.

On the morning of this visit the contractor transmitted data with their own people on their own equipment. In the past few days preceding the visit, the volume and frequency of transmissions had increased substantially.

The DSCMO monitor and NPC are working so that color and visual inspection data can be entered by the contractor in a single sitting for the same batch. As of the day of this visit, color data was being measured on line and entered in the back office some hours later. The backlog of old data from prior days is now caught up. Even with the delay of entering color data in the back office, the contractor should be able to send the current day's readings by the end of the same day, at least in most cases.

Once the contractor can enter color and visual inspection data in a single pass, the DSCMO monitor believes a good schedule to send data is once every twenty-four hours.

The DSCMO monitor said they do not pull their own independent samples. They reverify the samples pulled by the Quality Control technicians. They do this on an average once per hour. The frequency will vary depending on what problems are encountered during production.

The DSCMO monitor believes a help desk should address issues involving the measurement equipment. For example, how does one know the key wizard failed to close itself out after completing spectrophotometric measurements?

The help desk should be able to walk users through the process of setting nominals or adding batches or any other function related to the NPC software. In plants with only one on-site monitor, someone should at least be on call to answer questions.

The DSCMO monitor plans on being present the first few days of each new start up to help with introducing smooth use of the NPC software.

C. Quebecor Manager's Comments

The manager and his assistant elaborated on the problem of the data taking too long to save.

They reported a delay of seven to eight minutes was experienced when press people switched to the next measuring instrument. The software was being accessed over the company's computer network. This delay was not experienced by the on-site monitors on their machines which are not hooked up to the network.

When recording measurement data offline, the transition time between instruments was two to three minutes--an improvement but still too long to be considered convenient. If measurements were being recorded offline and out at the press at the same time, switching instruments at either end had been resulting in both parties being knocked out of the system with all the data being lost.

With the recent changes to the software, it runs more smoothly on Quebecor's network. Quebecor has been transmitting from its own equipment since March 26, 1999.

Transmitting is much easier now. It still has to take place outside the NPC software. To send data, the data file must be copied and processed through Quebecor's File Transfer Protocol program. Sending data this way takes three to four minutes and is not considered inconvenient. Quebecor is willing to continue sending data this way without objection.

Aside from the transmission issues, Quebecor reports the software is easy to learn and use.

Quebecor reports that all data from the start of production have been transmitted.

A convenient modification to the software would be the ability to skip over attributes that do not apply and have these skips remembered between consecutive samples.

The data transmitted the morning of this visit reflected the period from March 29, 1999 at 5:30 p.m. to March 30, 1999 at 9:30 a.m. Transmission of this data, consisting of approximately 70 records, was completed within five minutes.

Quebecor suggested that it would be a good idea in the future to confirm compatibility with the printer's computer network before starting work on a new contract.

Quebecor was satisfied with the help NPC was providing.

The Quebecor manager was asked how many quality samples had been sent to NPC. He checked and said shipments had been sent next day delivery via Fed Ex on March 19, March 22, March 23, March 24, March 25, and March 26.

The plan is to pull two samples for NPC for every fifteen minutes of continuous production. In a twenty-four-hour period, this amounts to a maximum of 192 samples. If production is interrupted, of course, the total in a given twenty-four hour period is less than 192.

III CONCLUSIONS

Listed below are the conclusions from the Quebecor Petty Plant trip.

- A. The major obstacles to sending data from this contractor have been surmounted.
- B. There is no evidence of a backlog of unsent data.
- C. There is evidence the contractor is tracking his quality sample shipments to NPC.
- D. Unless the compatibility of the NPC software with the printer's computer network can be verified before the start of printing, some transmission difficulties can be expected for every new contract. Their severity and nature cannot be predicted.
- E. Sending the DSCMO monitor, the most experienced user of the NPC software, for the first few days of each new printing start up is a good idea.
- F. The DSSD should explore whether the NPC software programmer should also be a part of each new printing start up. He could bring prior to production samples for testing on the contractor's premises before the start of live production. This would permit an early detection of problems in connecting the software with the contractor's computer hardware.
- G. The DSSD should be present on the next printing start up in early May. If transmissions snafus occur, we can assist with a back up procedure until snafus are cleared up.

cc:

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